

Puget Sound Air Pollution Control Agency

HEREBY ISSUES AN ORDER OF APPROVAL
TO CONSTRUCT, INSTALL, OR ESTABLISH

Notice of
Construction No. 3265

DATE **MUL 14 1989**

Upgrade Glass Furnace No. 5 with electrical boost.

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T

Marvin C Gridley, Ball-InCon Glass Packaging Corp

5801 E MARGINAL WAY S

SEATTLE

WA 98134-2497

O BALL-INCON GLASS PACKAGING CORP

W
N
E
R

5801 E MARGINAL WAY S

SEATTLE

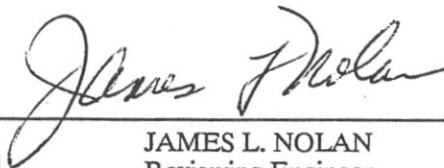
WA 98134-2497

INSTALLATION ADDRESS

BALL-INCON GLASS PACKAGING CORP, 5801 E MARGINAL WAY S, SEATTLE, WA, 98134-2497

THIS ORDER IS ISSUED SUBJECT TO THE FOLLOWING RESTRICTIONS AND CONDITIONS

1. Approval is hereby granted as provided in Article 6 of Regulation I of the Puget Sound Air Pollution Control Agency to the applicant to install, alter or establish the equipment, device or process described hereon at the INSTALLATION ADDRESS in accordance with the plans and specifications on file in the Engineering Division of PSAPCA.
2. Compliance with this ORDER and its conditions does not relieve the owner or operator from the responsibility of compliance with Regulations I or II, RCW 70.94 or any other emission control requirements, nor from the resulting liabilities and/or legal remedies for failure to comply.
3. This approval does not relieve the applicant or owner of any requirement of any other governmental agency.



JAMES L. NOLAN
Reviewing Engineer

HW



Anita J. Frankel
Air Pollution Control Officer

Notice of Completion

WARNING:

116526 ✓

Section I, Section 6.09(a), requires that the owner or applicant notify the Agency of the completion of the work covered by the application and when its operation will begin. This form is provided for your convenience to assist you in complying with this part of the Regulation.

APPLICANT or OWNER SECTION

Mail to: Puget Sound Air Pollution Control Agency
Plan Review Section
200 West Mercer Street, Room 205
Seattle, Washington 98110-3958

RECEIVED

APR 4 1990

**PUGET SOUND AIR POLLUTION
CONTROL AGENCY**

Gentlemen:

The project described below was completed on March 30, 1990 and will be in operation on March 30, 1990.

Mc Gridley

Signature of Owner and/or Applicant

PROJ. ENG.

Title

4/3/90

Date

AGENCY USE ONLY

Notice of Construction No. 3265

Project Description

Upgrade Glass Furnace No. 5 with electrical boost.

☐ Conditions On
Reverse Side

Applicant

Marvin C Gridley, Ball-InCon Glass Packaging Corp
5801 E MARGINAL WAY S, SEATTLE, WA, 98134-2497

Owner

BALL-INCON GLASS PACKAGING CORP
5801 E MARGINAL WAY S, SEATTLE, WA, 98134-2497

Location

BALL-INCON GLASS PACKAGING CORP, 5801 E MARGINAL WAY S, SEATTLE, WA, 98134-2497

☐ Inspector check

☐ Engineer JLN Dave and Inspector check

Follow-up 1 (Estimated completion Date Plus 7)

Date Inspected 12/11/90 Inspector

REMARKS Done - No opacity upset at this time. They
claim the boost lessens the natural gas requirement
and cuts emissions.

☒ See Attachment

hw



PUGET SOUND AIR POLLUTION CONTROL AGENCY

ENGINEERING DIVISION

200 WEST MERCER, ROOM 205, SEATTLE, WASHINGTON 98119-3958

(206) 344-7334

#5

Notice of Construction and Application for Approval

FORM P
SIDE 1

Be sure to complete items 39, 40, 41, & 43 before submitting Form P.

(AGENCY USE ONLY)

DATE 12/28/89 N/C NUMBER 3065
REG. NO. 11656 VAR. NO. _____
SIC. NO. _____ COS. NO. _____
GRID NO. _____ UTM _____

1. TYPE OF BUILDING (Check) <input type="checkbox"/> New <input checked="" type="checkbox"/> Existing	2. STATUS OF EQUIPMENT (Check) <input type="checkbox"/> New <input checked="" type="checkbox"/> Existing <input type="checkbox"/> Altered <input type="checkbox"/> Relocation	7. APPLICANT Same
3. COMPANY (OR OWNER) NAME Ball-InCon Glass Packaging Corp.		8. APPLICANT ADDRESS Same
4. COMPANY (OR OWNER) MAILING ADDRESS 5801 East Marginal Way South		9. INSTALLATION ADDRESS Same
5. NATURE OF BUSINESS Glass Container Manufacture		10. TYPE OF PROCESS Glass melting and forming

EQUIPMENT (ENTER ONLY NEW EQUIPMENT OR CHANGES. ENTER NUMBER OF UNITS OF EQUIPMENT IN COLUMN 'NO. OF UNITS.' COMPLETE FORM 'S' FOR EACH ENTRY.)

11. NO. OF UNITS	SPACE HEATERS OR BOILERS (Complete Form S-A)	14. NO. OF UNITS	OVENS	15. NO. OF UNITS	MECHANICAL EQUIP.	16. NO. OF UNITS	MELTING FURNACES
(a) _____		(a) _____	CORE BAKING OVEN	(a) _____	AREAS	(a) _____	POT
12. NO. OF UNITS	INCINERATORS (Complete Form S-B)	(b) _____	PAINT BAKING	(b) _____	BULK CONVEYOR	(b) _____	REVERBERATORY
		(c) _____	PLASTIC CURING	(c) _____	CLASSIFIER	(c) _____	ELECTRIC INDUC/RESIST
		(d) _____	LITHO COATING OVEN	(d) _____	STORAGE BIN	(d) _____	CRUCIBLE
13. NO. OF UNITS	OTHER SYSTEMS	(e) _____	DRYER	(e) _____	BAGGING	(e) _____	CUPOLA
		(f) _____	ROASTER	(f) _____	OUTSIDE BULK STORAGE	(f) _____	ELECTRIC ARC
(a) _____	DEGREASING, SOLVENT	(g) _____	KILN	(g) _____	LOADING OR UNLOADING	(g) _____	SWEAT
(b) _____	ABRASIVE BLASTING	(h) _____	HEAT-TREATING	(h) _____	BATCHING	(h) _____	OTHER METALLIC
(c) _____	OTHER - SYSTEM	(i) _____	OTHER	(i) _____	MIXER (SOLIDS)	(i) <u>1</u>	GLASS #5 furnace
(d) _____		(j) _____		(j) _____	OTHER	(j) _____	OTHER NON METALLIC
17. NO. OF UNITS	GENERAL OPER. EQUIP.	17. NO. OF UNITS	GENERAL OPER. EQUIP.	17. NO. OF UNITS	GENERAL OPER. EQUIP.	18. NO. OF UNITS	OTHER EQUIPMENT
(a) _____	CHEMICAL MILLING	(f) _____	GALVANIZING	(k) _____	ASPHALT BLOWING	(a) _____	SPRAY PAINTING GUN
(b) _____	PLATING	(g) _____	IMPREGNATING	(l) _____	CHEMICAL COATING	(b) _____	SPRAY BOOTH OR ROOM
(c) _____	DIGESTER	(h) _____	MIXING OR FORMULATING	(m) _____	COFFEE ROASTER	(c) _____	FLOW COATING
(d) _____	DRY CLEANING	(i) _____	REACTOR	(n) _____	SAWS & PLANERS	(d) _____	FIBERGLASSING
(e) _____	FORMING OR MOLDING	(j) _____	STILL	(o) _____	STORAGE TANK	(e) _____	OTHER

CONTROL DEVICES (ENTER NUMBER OF UNITS OF EQUIPMENT IN SPACES IN COLUMNS. COMPLETE A FORM R FOR EACH ENTRY.)

19. NO. OF UNITS	CONTROL DEVICE	20. NO. OF UNITS	CONTROL DEVICE	21. NO. OF UNITS	CONTROL DEVICE	22. NO. OF UNITS	CONTROL DEVICE
(a) _____	SPRAY CURTAIN	(a) _____	AIR WASHER	(a) _____	ABSORBER	(a) _____	DEMISTER
(b) _____	CYCLONE	(b) _____	WET COLLECTOR	(b) _____	ADSORBER	(b) _____	BAGHOUSE
(c) _____	MULTIPLE CYCLONE	(c) _____	VENTURI SCRUBBER	(c) _____	FILTER PADS	(c) _____	ELEC. PRECIPITATOR
(d) _____	INERTIAL COLL. - OTHER	(d) _____		(d) _____	AFTERBURNER	(d) _____	OTHER

23. BASIC EQUIPMENT COST (Estimate) 171,000	24. CONTROL EQUIPMENT COST (Estimate)	25. DAILY HOURS FROM _____ AM to _____ PM 24	26. DAYS OF OPERATION (Circle) S M T W T F S
--	---------------------------------------	--	---

27. ESTIMATED STARTING DATE OF CONSTRUCTION: December, 1990	28. ESTIMATED COMPLETION DATE OF CONSTRUCTION: December, 1990
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29. RAW MATERIALS (List starting material used in process) AND FUELS (Type and amount) *	ANNUAL AMT. Tons UNITS	30. PRODUCTS (List End Products)	ANNUAL PROD. Tons UNITS
(a) _____	24,200	(a) Glass containers	41,600
(b) Soda Ash	7,500	(b) _____	
(c) Limestone	6,300	(c) _____	
(d) Salt Cake	37	(d) _____	
(e) Carbocite	15	(e) _____	
(f) Iron Chromite	10	(f) _____	
(g) Iron Pyrites	28	(g) *See attached	

Notice of Construction Application

FORM P

STACKS OR VENTS (LIST NUMBER, TYPE, AND SIZE OF VENT)

31. NO. OF UNITS	DESCRIPTION OF OPENING	32. HEIGHT ABOVE GRADE (FT.)	33. VOLUME EXHAUSTED (ACFM)	DIMENSIONS (INCHES)	
				34. LENGTH (OR DIAM)	35. WIDTH
(a) 1	STACKS	70	39,000	38.5" diam.	
(b)	FLUES				
(c)	PROCESS OR GENERAL EXHAUST				
(d)	PROCESS OR GENERAL VENTS				
(e)	SKYLIGHT OR WINDOW				
(f)	EXHAUST HOOD				
(g)	OTHER				

FLOW DIAGRAM

36. FLOW DIAGRAM INSTRUCTIONS: Attached

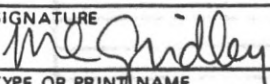
- (a) FLOW DIAGRAM MAY BE SCHEMATIC. ALL EQUIPMENT SHOULD BE SHOWN WITH EXISTING EQUIPMENT SO INDICATED.
- (b) SHOW FLOW DIAGRAM OF PROCESS STARTING WITH RAW MATERIALS USED AND ENDING WITH FINISHED PRODUCT.
- (c) IF MORE THAN ONE PROCESS IS INVOLVED TO MAKE FINISHED PRODUCT, SHOW EACH PROCESS AND WHERE THEY MERGE.
- (d) INDICATE ALL POINTS IN PROCESS WHERE GASEOUS OR PARTICULATE POLLUTANTS ARE EMITTED.
- (e) FLOW CHART CAN BE ATTACHED SEPARATELY IF NECESSARY. (DRAWINGS MAYBE SUBMITTED INSTEAD IF DESIRED).
- (f) SHOW PICKUP AND DISCHARGE POINTS FOR HANDLING OR CONVEYING EQUIPMENT.

LIST OF ATTACHMENTS AND ACCOMPANYING DATA OR COMMENTS:

Form S	Schedule of Equipment	Furnace Drawings
Flow Diagram	Emission Estimate	
Raw Materials and Fuels	Process/Furnace Description	
Plans/Specs	Tables 1, 2, 4, 21	

CERTIFICATION:

I, THE UNDERSIGNED, DO HEREBY CERTIFY THAT THE INFORMATION CONTAINED IN THIS APPLICATION AND THE ACCOMPANYING FORMS, PLANS, AND SUPPLEMENTAL DATA DESCRIBED HEREIN IS, TO THE BEST OF MY KNOWLEDGE, ACCURATE AND COMPLETE.

SIGNATURE 	40. DATE 6-29-89
TYPE OR PRINT NAME MARVIN C. GRIDLEY	42. TITLE PROJECT ENGINEER
	43. PHONE (317) 741-7145

Ball-InCon Glass Packaging Corp.
Seattle, Washington

Form P - #5 Furnace

29. Raw Materials

Fuel

Natural Gas	-	211,400 MCF
Electric Boost	-	8,640 M KWH

PUGET SOUND AIR POLLUTION CONTROL AGENCY

ENGINEERING DIVISION

200 WEST MERCER STREET •

• SEATTLE, WASHINGTON 98109 • (206) 296-7334

Glass furnace modification

Notice of Construction and Application for Approval

*Note: Information required by Section 1a must be completed, for this form to be accepted for review.

FOR BASIC PROCESS EQUIPMENT

FORM S

DATE June 27, 1989 N7C#

PLEASE CONSULT INSTRUCTION SHEET BEFORE FORWARDING

a. COMPLETE THE SECTIONS INDICATED ☒ 1 ☒ 2 ☒ 3 ☒ 4 ☒ 5 ☒ 6 ☐ 7 ☒ 8 ☒ 9 ☐ 10 ☐ 11 ☒ 12

b. COMPANY (OR OWNER) INSTALLATION ADDRESS
5801 East Marginal Way South

c. COMPANY (OR OWNER) NAME

Ball-InCon Glass Packaging Corp.

d. APPLICANT

Same

e. PREPARED BY: (Name and title)

M. C. Gridley, Proj. Eng.

f. PREPARED BY: (Signature)

McGridley

g. PHONE

317/741-7145

a. **PROCESS EQUIPMENT DATA**

b. Title

No. 5 Glass Furnace

c. Make and Model

Ball-InCon

d. Dimensions (LxWxH)

27'-6" x 16' x 34"

e. No. of units; rated capacity

1

f.

135 tons/day

g. Auxiliary Equipment

Electric boost

h. Connected To:

a. **BURNER DATA**

b.

Type of Burner, Fuel
Combustion Tech-gas/oil

c.

Make and Model
03-RF-MS-300-1469-15

d.

Rated Capacity
12 MM Btu/hr

e. No. of units; ignition method

4

f.

CFM Exhausted (Temperature)
34,000 @ 2800°F (°F)

h. Connected To:

a. **STACKS, VENTS AND EXHAUST OPENINGS**

b. Type of Vent

Stack

c. Dimensions

38.5" diam.

d.

70 ft. high

e. No. of vents; Material of construction

1

f.

Steel

g. CFM Exhausted (Temperature)
39,000 @ 620°F (°F)

h. Connected To:

a. **TANKS AND KETTLES**

b. Type of Tank, Material

c. Dimensions (LxWxH) in inches

d. Surface Area (Sq. Ft.)

☐ Closed ☐ Open

e. No. of tanks; Material of construction

f.

g. Auxiliary Equipment

h. Connected To:

a. **FAN DATA**

b. Type of Fan (Designate Blade)

c. Make and Model

d. Motor Data

RPM HP

e. No. of fans; Material of construction

f.

g. CFM Exhausted (Temperature)
(°F)

h. Connected To:

a. **OVENS AND FURNACES**

b. Type of Oven or Furnace
End-Port Regenerative

c. Make and Model
Ball-InCon

d. Rated Capacity
135 tons/day

e. No. of ovens; Material of construction

1

f.

Refractory

g. CFM Exhausted (Temperature)
39,000 @ 620°F (°F)

h. Connected To:

a. **OPERATIONAL DATA**

b. Type of Operation

☐ Batch ☒ Continuous

c. Operating Schedule (Normal)

7 d/wk
SHIFTS/DAY ☐ 1 ☐ 2 ☒ 3
43 (Ave) 47 (Max)

d. Mode of Operations

☐ Manual ☐ Auto ☒ Semi-Auto

e. Duration of Batch (Hrs/Batch)

f.

g. Daily Number of Batches

h.

a. **CONVEYOR DATA**

b. Type of Conveyor
(Pneumatic, Bolt)

c. Make and Model

d. Capacity

e. Dimensions (LxWxH)

f.

g. No. of Pickups No. of Discharge Pts

h. Connected To:

GAS FLOW

b. ACTUAL CFM

c. SCFM (Reg I Standard)

d. TEMPERATURE (°F)

IN OUT

e. PRESSURE DROP

f. EFFICIENCY

g. INLET AND OUTLET POLLUTANT CONCENTRATIONS

h.

a. **ADDITIONAL DATA**

b. ☐ ATTACH BROCHURE

c. ☒ ATTACH PLANS/SPECS

d. ☒ ATTACH EMISSION ESTIMATE

e. SUBMIT NARRATIVE DESCRIPTION OF PROCESS

f. ☐ SUBMIT SOURCE TEST DATA

g. ☐ SUBMIT MODELING DATA

h. ☒ ATTACH A SCHEDULE OF EQUIPMENT WITH MAKE, MODEL, CAPACITY

i. ☐ *before & after*

j. ☒ *Complete tables 1, 2 & 2.1 before & after*

k. ☐

l. ☐

TABLE
EMISSION SOURCES

List all sources, including this application, of air contaminants on applicant's property. If applicant has submitted this information in an earlier emission inventory, it will not be necessary to duplicate the requested information. Instead, indicate that this page has been submitted and list only changes from the emission inventory and list new source data.

ALL SOURCES

EMISSION POINT NUMBER from plot plan	LIST POLLUTANT EMISSIONS (CHEMICAL COMPOSITION) & WT. OF EACH	FLOW RATE OF EACH LISTED EMISSION	
		GASEOUS	PARTICULATE
Existing			
5	95% Na ₂ SO ₄		5.8 lb/hr.
	5% CaSO ₄		
With additional electric boost			
5	95% Na ₂ SO ₄		2.3 lb/hr.
	5% CaSO ₄		

STACKS ONLY

EMISSION POINT NUMBER from plot plan	STACK HEIGHT ABOVE GROUND (ft.)	STACK INTERNAL DIAMETER AT EXIT (ft.)	TEMP. DEG. (F)	VELOCITY (FT/SEC)	MOIS. %
5	70	3.2	620	72.7	8.5
5	70	3.2	550	65	8.5

ENCLOSE THE FOLLOWING INFORMATION:

1. EMISSIONS OTHER THAN THROUGH STACKS (HORIZONTAL VENTS, ETC.)
2. STACK'S HEIGHT ABOVE SUPPORTING OR ADJACENT STRUCTURES.
3. DIMENSIONS OF NON-CIRCULAR STACKS.
4. RESULTS OF TESTS INDICATING AVERAGE PARTICLE SIZE, DENSITY, ETC.

TABLE 2

#5 Furnace

MATERIAL BALANCE

A material balance table is used to quantify possible emissions of air contaminants and special emphasis should be placed on potential air contaminants, for example: If feed contains sulfur, show distribution to all products. Please relate each material (or group of materials) listed to its respective location in the process flow diagram by assigning point numbers (taken from the flow diagram) to each material.

LIST EVERY MATERIAL INVOLVED IN EACH OF THE FOLLOWING GROUPS	Point No. from Flow Diagram	Process Rate (lbs/hr or SCFM) standard conditions: 70°F 14.7 PSIA. Check appropriate column at right for each process.	Measurement	Estimation	Calculation
1. Raw Materials - Input Salt Cake Iron Pyrites	5	Existing-Salt Cake-18 lb/hr. Iron Pyrites-14 lb/hr. <u>With additional electric boost-</u> no change			X X
2. Fuels - Input					
3. Products & By-Products - Output					
4. Solid Wastes - Output					
5. Liquid Wastes - Output					
6. Airborne Waste (Solid) - Output Particulate matter	5	Existing - 5.8 lb/hr. <u>With additional electric boost</u> 2.3 lb/hr.	X		X
7. Airborne Wastes (Gaseous) - Output					

#5 - Existing Furnace

TABLE 4

COMBUSTION UNITS

OPERATIONAL DATA				
Number from flow diagram: 5		Model Number (if available):		
Name of device: No. 5 Glass Melting Furnace		Manufacturer: Ball-InCon		
CHARACTERISTICS OF INPUT				
Waste Material*	Chemical Composition			
	Material	Min. Value Expected lb/hr	Ave. Value Expected lb/hr	Design Maximum lb/hr
	1.			
	2.			
	3.			
	4.			
	5.			
Gross Heating Value of Waste Material (Wet basis if applicable)		Btu/lb	Air Supplied for Waste Material	Minimum SCFM (70°F & 14.7 psia)
				Maximum SCFM (70°F & 14.7 psia)
Waste Material or Contaminated Gas	Total Flow Rate lb/hr		Inlet Temperature of	
	Minimum Expected	Design Maximum	Minimum Expected	Design Maximum
Fuel	Chemical Composition			
	Material	Min. Value Expected lb/hr	Ave. Value Expected lb/hr	Design Maximum lb/hr
	1. Nat. Gas		25,700 cfh	27,000 cfh
	2.			
	3.			
	4.			
Gross Heating Value of Fuel		Btu/lb	Air Supplied for Fuel	Minimum SCFM (70°F & 14.7 psia)
		1034		4700
				Maximum SCFM (70°F & 14.7 psia)
				4900

*Describe how waste material is introduced into combustion unit on an attached sheet. Supply drawings, dimensioned and to scale to show clearly the design and operation of the unit.

(over)

#5 Furnace - with additional
electric boost

TABLE 4

COMBUSTION UNITS

OPERATIONAL DATA				
Number from flow diagram: 5		Model Number (if available):		
Name of device: No. 5 Glass Melting Furnace		Manufacturer: Ball-InCon		
CHARACTERISTICS OF INPUT				
Waste Material*	Chemical Composition			
	Material	Min. Value Expected lb/hr	Ave. Value Expected lb/hr	Design Maximum lb/hr
	1.			
	2.			
	3.			
	4.			
	5.			
Gross Heating Value of Waste Material (Wet basis if applicable)	Btu/lb	Air Supplied for Waste Material	Minimum SCFM (70°F & 14.7 psia)	Maximum SCFM (70°F & 14.7 psia)
Waste Material or Contaminated Gas	Total Flow Rate lb/hr		Inlet Temperature of	
	Minimum Expected	Design Maximum	Minimum Expected	Design Maximum
Fuel	Chemical Composition			
	Material	Min. Value Expected lb/hr	Ave. Value Expected lb/hr	Design Maximum lb/hr
	1. Nat. Gas		19,700 cfh	27,000 cfh
	2.			
	3.			
	4.			
Gross Heating Value of Fuel	Btu/lb ^{cf} 1034	Air Supplied for Fuel	Minimum SCFM (70°F & 14.7 psia) 3600	Maximum SCFM (70°F & 14.7 psia) 4900

*Describe how waste material is introduced into combustion unit on an attached sheet. Supply drawings, dimensioned and to scale to show clearly the design and operation of the unit.

(over)

TABLE 21
FURNACE DATA SHEET

Number from flow diagram	No. 5 - Existing	Furnace Type	
Furnace Manufacturer	Ball-InCon	<input type="checkbox"/> Electric	<input type="checkbox"/> Arc
Model Number		<input type="checkbox"/> Reverberatory	<input type="checkbox"/> Channel
Size (Dimensions)	27.5' x 16'x34"	<input type="checkbox"/> Crucible	<input type="checkbox"/> Coreless
		<input type="checkbox"/> Pot	<input type="checkbox"/>
		<input type="checkbox"/> Annealing or HT	<input type="checkbox"/> Cupola
		<input type="checkbox"/> Reheat	<input type="checkbox"/> Retort
		<input type="checkbox"/> Blast	<input checked="" type="checkbox"/> Other
		End-Port Regenerative	

FURNACE OPERATION

Metal Type Melted	Glass	Type Heat Additives	
Melting Capacity (tons/hr.)	5.63	Qty. of Heat Additives	
Holding Capacity (tons)	94	Pouring Temp. (°F)	2100
Charge Makeup	Sand, soda ash, limestone, fining agents, colorants	Afterburner (BTU/hr.)	
g Method	Gana	Ductile Iron Prod. (tons/hr.)	
Oxygen Injection		Method Temp. Control	
		Tuyere Air (SCFM*)	

CHARACTERISTICS OF FUEL INPUT

Fuel Type	Chemical Composition (% by Weight)	Inlet Air Temp. °F	Fuel Flow Rate (SCFM* or lb/hr.)	
Natural Gas		Ambient	Average	Design Max.
			428 scfm	450 scfm
			Total Air Supplied (SCFM*)	Gross Heating Value of Fuel (specify units)
		4700	1034 Btu/ft ³	

CHARACTERISTICS OF STACK OUTPUT

Material Emitted	Chemical Composition and Rate of Release	
Particulate matter	95% sodium sulfate 5% calcium sulfate	5.8 lb/hr.

STACK PARAMETERS

Stack Diameter	Stack Height	Temp. °F	Velocity	Moisture %
.5 in	70 ft.	620	72.7	8.5

Also supply an assembly drawing, dimensions, and to scale, in as many sections as are needed to show clearly the operation of the furnace.

*STANDARD CONDITIONS: 70°F, 14.7 PSIA

TABLE 21
FURNACE DATA SHEET

Number from flow diagram No. 5 - with additional electric boost	Furnace Type	
Furnace Manufacturer Ball-InCon	<input type="checkbox"/> Electric	<input type="checkbox"/> Arc
Model Number	<input type="checkbox"/> Reverberatory	<input type="checkbox"/> Channel
Size (Dimensions) 27.5' x 16' x 34"	<input type="checkbox"/> Crucible	<input type="checkbox"/> Coreless
	<input type="checkbox"/> Pot	
	<input type="checkbox"/> Annealing or HT	<input type="checkbox"/> Cupola
	<input type="checkbox"/> Reheat	<input type="checkbox"/> Retort
	<input type="checkbox"/> Blast	<input checked="" type="checkbox"/> Other
	End-Port Regenerative	

FURNACE OPERATION

Metal Type Melted Glass	Type Heat Additives
Melting Capacity (tons/hr.) 5.63	Qty. of Heat Additives
Holding Capacity (tons) 94	Pouring Temp. (°F) 2100
Charge Makeup Sand, soda ash, limestone, fining agents, colorants g Method Gana	Afterburner (BTU/hr.)
	Ductile Iron Prod. (tons/hr.)
	Method Temp. Control
Oxygen Injection	Tuyere Air (SCFM*)

CHARACTERISTICS OF FUEL INPUT

Fuel Type	Chemical Composition (% by Weight)	Inlet Air Temp. °F	Fuel Flow Rate (SCFM* or lb/hr.)	
Natural Gas		Ambient	Average	Design Max.
			328 scfm	450 scfm
			Total Air Supplied (SCFM*)	Gross Heating Value of Fuel (specify units)
		3600	1034 Btu/ft ³	

CHARACTERISTICS OF STACK OUTPUT

Material Emitted	Chemical Composition and Rate of Release	
Particulate matter	95% sodium sulfate 5% calcium sulfate	2.3 lb/hr.

STACK PARAMETERS

Stack Diameter	Stack Height	Temp. °F	Velocity	Moisture %
38.5 in	70 ft.	550	65	8.5

Also supply an assembly drawing, dimensions, and to scale, in as many sections as are needed to show clearly the operation of the furnace.

*STANDARD CONDITIONS: 70°F, 14.7 PSIA

RECEIVED

JUN 30 1989

**PUGET SOUND AIR POLLUTION
CONTROL AGENCY**

June 29, 1989

Ball-InCon
Glass Packaging Corp.
1509 South Macedonia Avenue
Muncie, IN 47302-3664
(317) 741-7000

Reply to: P.O. Box 4200
Muncie, IN 47307-4200



Ball-InCon

VIA FEDERAL EXPRESS

Puget Sound Air Pollution Control Agency
200 West Mercer Street, Room 205
Seattle, Washington 98119

Attn: Anita J. Frankel, Air Pollution Control Officer

Re: Section 9.25(b) - Notification
Ball-InCon Glass Packaging Corp.
5801 East Marginal Way South
Seattle, WA 98134

Dear Ms. Frankel,


Attached is information submitted in compliance with Regulation I, Section 9.25(b), which documents the means by which the #4 and #5 glass melting furnaces at our Seattle facility will achieve compliance with the 0.05 gr/dscf standard of Section 9.09(c). The installation of additional electric boost capacity will involve minimal construction.

Please note that the proposed date for the #5 installation is December, 1990, which is after the July 1, 1990 start date specified in Section 9.25(d). For scheduling reasons, we request that an extension be granted to allow installation to be made in December, 1990. The additional transformer capacity for the #4 system will be installed this year, in advance of the July 1, 1990 requirement. As we have stated previously, this work can only be done when the furnaces are at an idle condition for a period of several days. Our only opportunity is during the holiday production curtailment between Christmas and New Years' Day, and there is time for the installation of only one system during that period. Thus we request an extension so that the #5 system can be installed during the December, 1990 holiday curtailment and meet the final compliance date of January 1, 1991.

We have completed the Environmental Checklist as requested, even though it is designed for proposals with adverse environmental impacts; our proposal will result in air quality improvements.

If there are any questions or further information is required, please call me at (317) 741-7145.

Sincerely,


Marvin C. Gridley
Project Engineer

Attachments

NC 3265
8178

mittance Advice
nCon
s Packaging Corp.

Date	Draft No.
07-11-89	180841

P25977

ate	Invoice/Credit Memo	Type	Description	Gross	Discount	Net
1-89	License & Fee #8178			150.00		150.00
	25001006441 2296120					
Total ▶				150.00		150.00

RECEIVED

JUL 13 1989

PUGET SOUND AIR POLLUTION
CONTROL AGENCY

ch Before Depositing
5/87

B

Ball-InCon
Glass
Packaging
Corp.

Accounts
Payable
Draft

Draft No.

180841

EXACTLY \$150.00 CTS.

71-65
749

Pay to the order of

PUGET SOUND AIR POLLUTION CONTROL AGENCY.
WEST MERCER ST. ROOM 205
SEATTLE, WA. 98119-3958

Date

07-11-89

Draft amount

\$150.00****

Ball-InCon Glass Packaging Corp.

[Signature]

Chief Financial Officer/Authorized Signature

Payable through Merchants National Bank, Muncie, Indiana 47305

⑈ 180841 ⑈ ⑆074900657⑆ 144 633 9⑈

Company Boll In Con
 Source Upgrade #15 furnace
 Recommended: ☒ Approval
 Conditional Approval ☐
 Disapproval ☐

Assigned to JAN
 Date Assigned 7/3/89

N/C # 3265
 Rec'd 6/30/89

BACT/LAER Analysis:

Circle All Applicable:

NSPS PSD CEM Offset
 NESHAPS I/O/M Publish Class I
 Visibility Model Monitor Screening
 Analysis Req'd Req'd Req'd
 Records Report Source Test

Lead Agency: PSAPCA other

Source Located In: TSP-AA TSP-NAA
 Ozone-AA Ozone-NAA SO₂-AA SO₂-UNCL

Emission Calculations:

Present TSP

$$\frac{(5.8 \text{ #/hr})(8760 \frac{\text{hr}}{\text{yr}})}{2000 \text{ #/ton}} = 25.4 \text{ TPY}$$

Proposed TSP

$$\frac{(2.3)(8760)}{2000} = 10.0$$

 — 15.4 TPY

Specific Conditions:

Emission Summary					
Emission:		Increase +	Decrease -	No Change (blank)	
Pollutant	Part	SO ₂	NO _x	CO	VOC
Tons/Year	15.4				
BACT Met	✓				
AQ Stds.	✓				
Review by <u>JAN</u> Date <u>7/5/89</u> Approval <u>D</u> Date <u>7/5/89</u> Approval <u>JAN</u> Date <u>7/5/89</u>					